

Commonwealth of Kentucky
Division for Air Quality
EXECUTIVE SUMMARY

PROPOSED

Title V/Operating

Permit: V-08-039

Eastern Kentucky University

Richmond, KY 40475-3102

February 11, 2009

Permit Writer, Esmail Hassanpour

SOURCE ID: 21-151-00007

AGENCY INTEREST: 2820

ACTIVITY: APE20080001

SOURCE DESCRIPTION:

Eastern Kentucky University (EKU) applied to the Kentucky Division for Air Quality (DAQ) for the renewal of their Title V permit on September 16, 2008. The source, located in Richmond, KY, currently holds operating permit (V-03-025 R2) for the operation of indirect heat exchangers. The facility has three stoker bed coal-fired boilers, two rated at 65.8 MMBtu/hr (emission units 01& 02) and emission unit 04 rated at 84.0 MMBtu/hr, which provide energy to various areas on the EKU campus. Exhaust gasses from the coal burners are directed into a common duct which carries the gasses to a bag house. From the bag house, another duct directs the exhaust gasses through a fan and to a brick stack. Pressure and temperature are monitored on the bag house control panel. Coal is delivered to the boiler operation via truck from the coal storage facility located on campus. The coal is transferred through a vertical conveyor to storage hoppers located above each boiler. Ash is manually removed from the bottom of the stoker and placed in an under-floor conveyor, which moves it to the ash silo. Ash is typically loaded from the silo into trucks and shipped back to the mines via EKU contract with the delivering coal company

A fourth boiler rated at 38.14 MMBtu/hr (emission unit 06), burns only natural gas. EKU has additional twenty eight (28) small boilers rating between 2 MMBtu/hr and 10 MMBtu/hr (emission unit 07-34), constructed before 1972, which burn natural gas and supply heat to the dormitories. Other permitted units include a 0.5 gal/hr paint booth, and significant units including, nineteen (19) natural gas emergency generators, twenty four (24) emergency generators, a woodshop, coal and ash handling operation, seven natural gas kilns and two natural gas melting furnaces. The facility is classified major because potential emission of each regulated air pollutant, nitrogen oxide (NO_x) and sulfur dioxide (SO₂) is greater than 100 ton per year each.

PUBLIC AND AFFECTED STATE REVIEW:

On January 9, 2009, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in The Richmond Register in Richmond, Kentucky. The public comment period expired 30 days from the date of publication. No states are affected by this permit action.

No comments were received during this period. The final determination of this Division is that the proposed operation will comply with all air quality regulations and requirements. The permit is now being issued as proposed. A final permit will be issued after the U.S. EPA's 45-day review.